DRAFT

HAZARDOUS WASTE POST-CLOSURE PERMIT

COLFAX TREATING COMPANY, LLC
EPA ID# LAD 069 524 981
Alexandria, Louisiana
Rapides Parish

Agency Interest # 97707 / PER20040001
Permit Number LAD 069 524 981 PC-RN-1

I. PERMIT PREAMBLE

This permit is issued to Colfax Treating Company, LLC, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purpose of this permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Administrative Authority" means the Secretary of the Louisiana Department of Environmental Quality or his/her designee.

"Application" refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a permit.

"Area of Concern" (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU. If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

"Area of Investigation" (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

"Beneficial Resource" describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a "Special Beneficial Resource," or "Designated Beneficial Resource." The beneficial resources then may be entitled to greater protection from contamination.

"Constituents of Concern" (COC) means the COPC's that pose a significant risk.

"Constituents of Potential Concern" (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC's for each release site based on existing sampling data, waste analysis reports, etc.

"Conceptual Site Model" (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

"**CWA**" means Clean Water Act.

"**Corrective Action**" is an activity conducted to protect human health and the environment.

"**DNAPL**" (Dense Non-Aqueous Phase Liquids) a dense liquid not dissolved in water, commonly referred to as "free product."

"**Department**" means the Louisiana Department of Environmental Quality (LDEQ).

"**EPA**" means the United States Environmental Protection Agency.

"**HSWA**" means the 1984 Hazardous and Solid Waste Amendments to RCRA.

"**Hazardous Constituent**" means any constituent identified in LAC 33:V.Chapter 31. Table 1, or any constituent identified in LAC 33:V.3325. Table 4.

"**LDEQ**" means the Louisiana Department of Environmental Quality.

"**LNAPL**" (Light Non-Aqueous Phase Liquids) a light liquid not dissolved in water, commonly referred to as "free product."

"**Operating Record**" means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this permit, document noncompliance with this permit, or document actions taken to remedy noncompliance with this permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.

"**Permittee**" means Colfax Treating Company, 3600 Koppers Street, Alexandria, Louisiana 71302.

"**RCRA Permit**" means the full permit, with RCRA and HSWA portions.

"**RFA**" means RCRA Facility Assessment.

"**RFI**" means RCRA Facility Investigation.

"**Release**" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"**SARA**" means Superfund Amendments and Reauthorization Action of 1986.

"**Solid Waste Management Unit**" (**SWMU**) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C. of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care activities associated with the Chatlin Lake Canal and Vacuum Pump Cooling Water Pond in accordance with the conditions of this permit. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulation, or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

II.E.8.d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method.

II.E.9.b. Records of monitoring information shall include:

II.E.9.b.(1) the date, exact place, and time of sampling or measurements;

II.E.9.b.(2) the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

II.E.9.b.(3) the date(s) analyses were performed;

II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5) the analytical techniques or methods used;

II.E.9.b.(6) the results of such analyses; and

II.E.9.b.(7) associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the LDEQ required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the LDEQ.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: http://www.deq.state.la.us/laboratory/index.htm.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the LDEQ;
- required to be included in a monitoring report submitted to the LDEQ;
- required to be submitted by contract; or
- otherwise required by the LDEQ regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3. Laboratory Accreditation.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all ground water monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date (LAC 33:V.309.L.6).

II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Conditions II.E.16, II.E.17 or II.E.18 of this permit. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 or Condition II.E.17 of this permit that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1) name, address, and telephone number of the owner or operator;

II.E.20.b.(2) name, address, and telephone number of the facility;

II.E.20.b.(3) date, time, and type of incident;

II.E.20.b.(4) name and quantity of materials involved;

II.E.20.b.(5) the extent of injuries, if any;

II.E.20.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment not reported under Condition II.E.19 of this permit. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20 of this permit.

II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.25. Schedule of Compliance

The Permittee shall submit for review and approval by the Administrative Authority, the following items:

II.E.25.a. Within sixty (60) days of the effective date of this permit, the Permittee shall submit an RFI Addendum Report documenting all RFI assessment work completed and all data gathered since the submittal of the Final RFI Report in March of 2000. The schedule of compliance will then be in accordance with Table 1 of Appendix 1.

II.E.25.b. Within sixty (60) days of the effective date of this permit, the Permittee shall submit an updated Sampling and Analysis Plan for approval. The Sampling and Analysis Plan must include revisions to the tables specifying the hazardous constituents to be analyzed and associated sampling frequencies. The Sampling and Analysis Plan must also include updated information as per the Corrective Action Program specified in Condition VI.

A Class I Modification request must be submitted to the Administrative Authority after the updated Sampling and Analysis Plan is approved. If significant changes (that are inconsistent with Condition VI) are proposed in the updated SAP, the Administrative Authority may determine that the modification request must follow the procedures for a Class 2 or Class 3 Modification.

II.E.26. Additional Operating Standards

(RESERVED)

II.E.27. Updated Documents to Be Submitted Prior to Operation

(RESERVED)

II.E.28. Documents to Be Maintained at Facility Site

II.E.28.a. Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

II.E.28.a.(1) Waste Analysis Plan submitted in accordance with LAC 33:V.1519 (see Attachment 1).

II.E.28.a.(2) Personnel Training Plan and the training records as required by LAC 33:V.1515 (see Attachment 1).

II.E.28.a.(3) Contingency Plan submitted in accordance with LAC 33:V.1513 (see Attachment 1).

II.E.28.a.(4) Arrangements with local authorities in accordance with LAC 33:V.1511.G. (see Attachment 1).

II.E.28.a.(5) Post-Closure Plan submitted in accordance with LAC 33:V.3523 and any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523. (see Attachment 1).

II.E.28.a.(6) Cost estimate for facility post-closure care submitted in accordance with LAC 33:V.3709 and any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).

II.E.28.a.(7) Operating Records Plan as required by LAC 33:V.1529.

II.E.28.a.(8) Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B. (see Attachment 1)

II.E.28.a.(9) Security Plan developed in accordance with LAC 33:V.1507. (see Attachment 1)

II.E.28.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.29. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.30. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

II.E.31. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.32. Waste Discharges

Waste discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.33. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an unpermitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.23 of the General Permit Conditions.

II.E.34. Compliance With Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

II.E.35. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.36. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.37. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL POST-CLOSURE CONDITIONS

III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT

III.A.1. The Permittee must maintain all facilities to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

III.A.2. The Permittee must not manage any new wastes.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the Waste Analysis Plan (Attachment 1) and in accordance with LAC 33:V.1519.

III.C.1. The Permittee shall review the Waste Analysis Plan annually and report to the Administrative Authority, in the annual report, whether any revision is required to stay abreast of changes in EPA methods and/or State regulatory provisions.

III.C.2. If there is reason to believe that the hazardous waste has changed or the operation generating the hazardous waste has changed, the Permittee shall review and recharacterize all hazardous waste streams generated by the Permittee onsite and treated, stored or disposed onsite. The Permittee must recharacterize wastes in accordance with LAC 33:V.1519.A.3. This recharacterization shall include laboratory analyses which provide information needed to properly treat, store and dispose of the hazardous waste, including physical characteristics and chemical components of the waste. The results of this recharacterization shall be summarized in the Permittee's Annual Report.

III.C.3. The Permittee shall submit documentation or certification if the Permittee contracts with an outside laboratory for any service required by the Waste Analysis Plan or LAC 33:V.Chapter 15. This documentation or certification shall be resubmitted when a different laboratory is contracted. The Permittee shall also submit documentation that the laboratory complies with the accreditation requirements of LAC 33:I.Chapter 45.

III.C.4. In accordance with LAC 33:V.1519.B, the Waste Analysis Plan must meet all the sampling and QA/QC procedures of Condition II.E.9. All test procedures used by the Permittee shall be maintained on file by the Permittee and made available to the Administrative Authority upon request.

III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the Inspection Plan referenced in Condition II.E.28.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.B.

III.F. PERSONNEL TRAINING

The Permittee must conduct personnel training as required by LAC 33:V.1515.A, B, and C. The training shall follow the outline referenced in Attachment 1. The Permittee must maintain all training documents and records as required by LAC 33:V. 1515.D and E.

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911.

III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

III.K. PREPAREDNESS AND PREVENTION

III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

III.K.4. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

III.L. CONTINGENCY PLAN

III.L.1. Implementation of Plan

The Permittee must immediately carry out the provisions of the Contingency Plan, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

III.L.2. Copies of Plan

The Permittee must comply with the requirements of LAC 33:V.1513.C.

III.L.3. Amendments to Plan

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

III.L.4. Emergency Coordinator

The Permittee must comply with the requirements of LAC 33:V.1513.E, and 322.B.6 concerning the emergency coordinator.

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 9 and 11.

III.N. RECORD KEEPING AND REPORTING

III.N.1. Operating Record

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, C.

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.N.3. Operations Manual

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's treatment, storage and disposal facilities.

III.O. POST-CLOSURE

III.O.1. Post-Closure Care

The Permittee must manage the Chatlin Lake Canal, and Vacuum Pump Cooling Water Pond in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and 2911.

III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D. and LAC 33:V.321.

III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

III.O.5. Post-Closure Property or Site Use

III.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.(1) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.(2) is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within 60 days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

III.P.1. The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.

III.P.2. The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.

III.P.3. The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.

III.P.4. The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any resubmittal.

III.P.5. During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.

III.P.6. Throughout the active life of the facility, the Permittee must adjust and revise its post-closure cost estimates, as necessary, to comply with the provisions of LAC 33:V.3709.

III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

III.R. LIABILITY REQUIREMENTS

(RESERVED)

III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC

33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

III.T.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED CLOSED UNITS

This permit is applicable only to the units known as the Chatlin Lake Canal, and Vacuum Pump Cooling Water Pond located on the property of Colfax Treating Company, LLC, Rapides Parish, Louisiana. This permit also applies to any appurtenances associated with these units. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with these regulated units. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

TABLE 1
INVENTORY AT CLOSURE

UNIT NAME	UNIT TYPE	SURFACE AREA
Chatlin Lake Canal	Surface Impoundment	12,550 square feet
Vacuum Pump Cooling Water Pond	Surface Impoundment	25,000 square feet

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.1 and 2, Length of Post-Closure.

V.A.1. Chatlin Lake Canal: On March 7, 1988, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.A.2. Vacuum Pump Cooling Water Pond: On March 7, 1988, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.

V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527 and Condition III.O of this permit, including maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1. The owner or operator must:

V.B.1. for all permitted units, maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.B.2. for all permitted units, maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V, Chapter 33;

V.B.3. for all permitted units, manage a run-on and run-off control system to prevent erosion at and other damage to the final cover;

V.B.4. for all permitted units, maintain the cover with a final cover designed, constructed and maintained to:

V.B.4.a. provide long-term minimization of migration of liquids through the surface impoundments,

V.B.4.b. function with minimal maintenance at all permitted units,

V.B.4.c. promote drainage and minimize erosion or abrasion of the final cover at all permitted units,

V.B.4.d. accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units, and

V.B.4.e. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present at the surface impoundments.

V.B.5. The annual report shall include a Post-Closure activity report for the Chatlin Lake Canal and Vacuum Pump Cooling Water Pond.

V.C. POST-CLOSURE RESTRICTIONS

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure period when access by the public or domestic livestock may pose a hazard to human health.

V.D. POST-CLOSURE USE OF PROPERTY

V.D.1. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority find that the disturbance:

V.D.1.a. is necessary to the proposed use of the property and will not increase the potential hazard to human health or the environment; or

V.D.1.b. is necessary to reduce a threat to human health of the environment.

V.D.2. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 29, 33, 35, and 37, and Louisiana Hazardous Waste Control Law Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of this condition shall apply to groundwater protection programs at the units identified in Condition IV, Table 1 of this permit. All requirements of this condition must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit. This includes compliance, closure, and post closure care periods. The units referenced in Condition IV, Table 1 of the permit are subject to post-closure groundwater monitoring. If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action programs in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

The Permittee must continue to conduct a corrective action program per Condition VI.J using all existing systems necessary to comply with monitoring programs specified herein and as stated in the most current approved Sampling and Analysis Plan. Corrective actions must continue uninterrupted to the fullest extent until groundwater problems are abated per the requirements of LAC 33:V.3321 and this requirement is terminated through permit modifications in accordance with LAC 33:V.321 and 322, as applicable.

All wells and any associated piezometers described in Table 2 of this permit must be maintained, protected from moving equipment, and cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well or piezometer is threatened. In such a case, it must be replaced with a new well, in conformance with a work plan approved by the Administrative Authority. (see Condition VI.K – Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes) The Permittee must include in the Annual Report revised facility maps, which will show all its monitoring, assessment, compliance, and corrective action wells.

VI.C. GROUNDWATER PROTECTION STANDARD

VI.C.1. The Permittee must comply with conditions specified in this permit that are designed to insure that hazardous waste and hazardous waste constituents do not exceed the concentration limits (see Condition VI.D) in the uppermost permeable zones underlying the waste management areas, beyond or below the points of compliance (see Condition VI.E) during the compliance period (see Condition VI.F). The protection standard does not exempt the Permittee from required corrective action regarding contamination detected by wells not assigned as groundwater compliance points.

VI.C.2. The Permittee must utilize and maintain the present groundwater monitoring system described in this permit.

VI.C.3. The Permittee must adhere to the Sampling and Analysis Plan referenced in Attachment 1.

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the protection standards of LAC 33:V.3305 apply are shown herein in Tables 2 and 3. The sampling frequency for constituents is noted in Table 2.

The Permittee must continue existing corrective action or institute corrective action in all areas associated with the permitted post-closure units and appurtenances where groundwater has been affected by hazardous wastes, hazardous constituents, or parameters exceeding the assigned concentration limits, and implement corrective measures in other areas which may be discovered to exceed these limits in the future.

Table 2
Monitoring Well Network

Well Name	Associated Unit	Well Type	Zone Screened	Sampling Frequency and Parameters
MW-1	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Miocene	Semi-Annually(1)
MW-1N	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-2A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-2B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Miocene	Semi-Annually(1)
MW-3	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-4	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-4R	Chatlin Lake Canal & Vacuum Water Cooling Pond	Recovery	Alluvial	Table 3-Semi-Annually

Well Name	Associated Unit	Well Type	Zone Screened	Sampling Frequency and Parameters
MW-5A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-5B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-5C	Chatlin Lake Canal & Vacuum Water Cooling Pond	POC	Miocene	Table 3-Semi-Annually
MW-6R	Chatlin Lake Canal & Vacuum Water Cooling Pond	POC/Recovery	Alluvial	Table 3-Semi-Annually
MW-7R	Chatlin Lake Canal & Vacuum Water Cooling Pond	Recovery	Alluvial	Table 3-Semi-Annually
MW-8A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-8B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-8R	Chatlin Lake Canal & Vacuum Water Cooling Pond	Recovery	Alluvial	Table 3-Semi-Annually
MW-9	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-10A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-10B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]
MW-10C	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-10D	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Miocene	Semi-Annually[1]
MW-12A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually[1]

Well Name	Associated Unit	Well Type	Zone Screened	Sampling Frequency and Parameters
MW-12B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-13	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-14A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Upgradient	Alluvial	Table 3-Semi-Annually
MW-14B	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Miocene	Semi-Annually(1)
MW-15	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-16R	Chatlin Lake Canal & Vacuum Water Cooling Pond	Recovery	Alluvial	Table 3-Semi-Annually
MW-17R	Chatlin Lake Canal & Vacuum Water Cooling Pond	Recovery	Alluvial	Table 3-Semi-Annually
MW-18	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-19	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-20	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-21	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-22A	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-22B	Chatlin Lake Canal & Vacuum Water Cooling Pond	POC	Miocene	Table 3-Semi-Annually
MW-23R	Chatlin Lake Canal & Vacuum Water Cooling Pond	POC/Recovery	Alluvial	Table 3-Semi-Annually

Well Name	Associated Unit	Well Type	Zone Screened	Sampling Frequency and Parameters
MW-24R	Chatlin Lake Canal & Vacuum Water Cooling Pond	POC/Recovery	Alluvial	Table 3-Semi-Annually
MW-25	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-26	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-27	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-28	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-29	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-30	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-32	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-33	Chatlin Lake Canal & Vacuum Water Cooling Pond	Piezometer	Alluvial	Semi-Annually(1)
MW-34	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Miocene	Table 3-Semi-Annually
MW-35	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually
MW-36	Chatlin Lake Canal & Vacuum Water Cooling Pond	Plume Defining	Alluvial	Table 3-Semi-Annually

(1) Only depth to water measurements will be collected from piezometers.

Table 3
Groundwater Monitoring Parameters

Parameter	Container Type	Preservation Method	Analytical Method[2]	Concentration Limit[3] (ug/L)
Specific Conductivity[1]	Glass or Polyethylene	Field Measure	9050	Not Applicable
pH[1]	Glass or Polyethylene	Field Measure	9040	Not Applicable
Total Phenols	*Glass*	*H_2SO_4 to pH <2 Cool to 4°C*	*9066*	*10*
Acenaphthene	Glass	Cool to 4°C	8270	10
Acenaphthylene	Glass	Cool to 4°C	8270	10
Anthracene	Glass	Cool to 4°C	8270	10
Benzene	Glass	Cool to 4°C	8260	5
Benzo(a)anthracene	Glass	Cool to 4°C	8270	10
Benzo(b)fluoranthene	Glass	Cool to 4°C	8270	10
Benzo(k)fluoranthene	Glass	Cool to 4°C	8270	10
Benzo(a)pyrene	Glass	Cool to 4°C	8270	10
Carbazole	Glass	Cool to 4°C	8270	10
p-Chloro-m-Cresol	Glass	Cool to 4°C	8270	10
2-Chlorophenol	Glass	Cool to 4°C	8270	10
Chrysene	Glass	Cool to 4°C	8270	10
o-Cresol	Glass	Cool to 4°C	8270	10
p-Cresol	Glass	Cool to 4°C	8270	10
Dibenzo(a,h)anthracene	Glass	Cool to 4°C	8270	10
Dibenzofuran	Glass	Cool to 4°C	8270	10
1,2-Dichloroethane	Glass	Cool to 4°C	8260	5
2,4-Dimethylphenol	Glass	Cool to 4°C	8270	10
2,4-Dinitrophenol	Glass	Cool to 4°C	8270	10
2,4-Dinitrotoluene	Glass	Cool to 4°C	8270	10
Fluoranthene	Glass	Cool to 4°C	8270	10
Fluorene	Glass	Cool to 4°C	8270	10
Indeno(1,2,3-cd)Pyrene	Glass	Cool to 4°C	8270	10
2-Methylnaphthalene	Glass	Cool to 4°C	8270	10
Naphthalene	Glass	Cool to 4°C	8270	10
Pentachlorophenol	Glass	Cool to 4°C	8270	10
Phenanthrene	Glass	Cool to 4°C	8270	10
Phenol	Glass	Cool to 4°C	8270	10
Pyrene	Glass	Cool to 4°C	8270	10
2,3,4,6-Tetrachlorophenol	Glass	Cool to 4°C	8270	10
2,4,6 Trichlorophenol	Glass	Cool to 4°C	8270	10

(1) As per VI.G.9, pH and specific conductance will be measured as standard indicator parameters of groundwater contamination which will be used to indicate well integrity and possible groundwater contamination.

(2) Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846.

(3) Unless otherwise denoted by footnotes 4 and 5, these concentration limits are based on the Practical Quantitation Limit (PQL). The Permittee must report to the Administrative Authority, any detectable level of compounds on Table 3, even if lower than the Practical Quantitation Limit (PQL). PQL denotes the lowest analyte concentration in a given matrix (groundwater) that the Administrative Authority believes a competent lab can be expected to achieve consistently. Samples must be analyzed using an SW-846 method that meets the listed detection limit.

VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Table 2 and required by Condition VI.C.2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as Point of Compliance wells in Table 2 unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the Uppermost Aquifer.

When contamination is detected in the uppermost permeable zone underlying the waste management area, the next vertical aquifer or permeable zone must also be monitored. Since hazardous constituents have been detected at the point of compliance above the groundwater protection standard, the Permittee has instituted a corrective action program. During the corrective action program (i.e., until such time as hazardous constituents are no longer detected above the groundwater protection standard at the point of compliance and beyond), the groundwater quality at each monitoring well (including point of compliance wells, plume defining wells and recovery wells) identified in Table 2 must be monitored in order to determine the effectiveness of the corrective action. Additional monitoring wells may be installed, as required.

VI.F. COMPLIANCE PERIOD

The compliance period during which the groundwater protection standard of LAC 33:V.3305.A applies is until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7. of this permit. However, if a corrective action program has been implemented, the compliance period can not end until after the Permittee has demonstrated that the corrective action has been effectively implemented and the groundwater protection standard of LAC 33:V.3305.A has not been exceeded for a period of three (3) consecutive years.

VI.G. GENERAL REQUIREMENTS

VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management facilities must consist of all wells as listed in Table 2, unless changed in the future by the Administrative Authority through permit modification.

VI.G.2. The Permittee must maintain the structural and mechanical integrity of all wells and provide protection from accidental damage and surface infiltration, as well as implement a monitoring well inspection schedule. A written report on damage to any well must be submitted to the Administrative Authority in accordance with Condition II.E.21 of this permit.

VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water bearing zone that are representative of groundwater that has not been affected by possible leakage from the waste management units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water bearing zones that represent the quality of groundwater beneath the facilities that flows to the points of compliance.

VI.G.4. The Permittee must conform to the sampling and analysis requirements listed in Conditions VI.C and as required by LAC 33:V.3315.

VI.G.5. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot, and the values must be recorded in the field notebook and reproduced and submitted in the Groundwater Annual Report. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.

VI.G.6. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Other techniques (e.g., micro-purging) must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. (Micro-purging may be allowed with the approval of the Administrative Authority.) Purging methods must be consistent throughout the life of the permitted closed unit.

VI.G.7. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices other than bailers must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the permitted closed unit.

VI.G.8. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.G.9. The Permittee must measure pH and specific conductance as standard indicators of groundwater contamination, which will be used to indicate well integrity and possible groundwater contamination. The results of these analyses must be recorded in the field log book and interpreted.

VI.G.10. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

VI.G.11. Sample preservation, handling and analysis must meet of the specifications of LAC 33:V.3315.D and E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd. Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Table 3 of this permit.

VI.G.12. The Permittee must use one of the statistical procedures outlined in the most current approved facility Sampling and Analysis Plan or LAC 33:V.3315.H in determining whether background values or concentrations have been exceeded for the hazardous constituents specified in Table 3.

VI.G.13. Records of all sampling and analytical work must be maintained at the site during the life of the facilities, including post-closure care periods. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents (for each sample) the well identification number, total well depth, elevation of top of casing, water level, water color (visual), well evacuation procedures and equipment, sample withdrawal procedures and equipment, date, time sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing water volume in the well, and the total volume evacuated.

VI.H. DETECTION MONITORING PROGRAM

RESERVED (Permittee currently in the Corrective Action Program as per Condition VI.J) Any downgradient wells that become contaminated, but eventually produce groundwater samples with analytical results below the permitted concentration limits for monitored constituents for at least three (3) years as the result of a corrective action program, may be re-scheduled for detection monitoring on a schedule approved by the Administrative Authority.

VI.I. COMPLIANCE MONITORING

RESERVED (Permittee currently in the Corrective Action Program as per Condition VI.J) Subsequent to the Detection Monitoring Program (Condition VI.H), the Permittee must conduct a Compliance Monitoring Program in accordance with LAC 33:V.3319 whenever hazardous waste constituents are confirmed in any monitoring well of the Detection Monitoring Program.

VI.J. CORRECTIVE ACTION PROGRAM

The Permittee currently has a Corrective Action Program for groundwater contamination as a result of operations related to past or present hazardous waste management facilities identified in Condition VI.A of this permit. The Permittee must continue or expand the Corrective Action Program in accordance with the requirements of LAC 33:V.3321 and as subsequently directed by the Administrative Authority. Water quality sampling, water level measurements and the general compilation of data to demonstrate the effectiveness of existing and new corrective action programs must be made until compliance with groundwater protection standards is achieved for at least three (3) years or until this requirement is terminated in writing by the Administrative Authority (after the data indicates adequate control of contaminant migration and concentration increases).

VI.J.1. The Permittee must evaluate and report the effectiveness and progress of the corrective action semi-annually to the Administrative Authority as required by LAC 33:V.3321.G. and in accordance with Condition VI.L.1.j. The evaluation shall include the following:

VI.J.1.a. general discussion on the effectiveness of the corrective action in controlling the source of release and protecting human health and the environment, and progress being made toward completion;

VI.J.1.b. trend analysis and updated schedule for completion of the corrective action;

VI.J.1.c. evaluation of performance reliability, ease of implementation and any encountered concerns or problems;

VI.J.1.d. any changes to surrounding land use or environmental receptors that may impact effectiveness;

VI.J.1.e. recommendations for improvement;

VI.J.1.f. recovered amounts for each component of a recovery system (e.g., recovery wells, French drain systems, etc.) and the entire system; recovered amounts for both contaminants and all liquids; recovered amounts for both the reporting period and since recovery implementation; and

VI.J.1.g. graphical and statistical analyses, as necessary, to demonstrate the effectiveness and progress (the Administrative Authority may also require predictive computer modeling, as per LAC 33:V.3303.D.).

VI.J.2. Plume defining wells are wells present or proposed for installation along the perimeter of the plume and serve the purpose of insuring detection of any enlargement of the plume.

VI.J.2.a. The plume defining wells as listed in Table 2 must be sampled according to a frequency approved by the Administrative Authority, as part of the on-going evaluation of the corrective action program, for constituents specified in Table 3 to satisfy LAC 33:V.3315.A.3.

VI.J.2.b. If the Permittee determines that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents at any plume defining wells previously reported as non-detect, the Permittee must notify the Administrative Authority of the finding in writing within seven days. This notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination. Further, the Permittee must do one of the following:

VI.J.2.b.(1) Submit an application for a permit modification to the Administrative Authority within 90 from the date of the confirmation of contamination. The application must include a plan to perform an additional assessment to identify the full extent of the plume and propose any changes necessary to the corrective action to achieve the groundwater protection standard. The application shall include any proposed changes to the groundwater monitoring system, monitoring frequency, sampling and analysis procedures and methods, and/or statistical methods; or

VI.J.2.b.(2) Demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.J.2.b.(2).a. Specify the Permittee's intention to make a demonstration under this Paragraph when notifying the Administrative Authority of the statistically significant evidence of contamination;

VI.J.2.b.(2).b. Within 90 days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation. Further, the Permittee must submit an application for a permit modification to make any appropriate changes to the monitoring program; and

VI.J.2.b.(2).c. Continue to monitor in accordance with the monitoring program established under this permit.

VI.J.3. If the Permittee determines that the corrective action program (including monitoring) no longer satisfies the requirements of this permit, the Permittee, within 90 days, shall submit an application for a permit modification to make any appropriate changes to the program.

VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in **"CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK"**, dated May 1993 ("Construction Handbook", May 1993). This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245.

A work plan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the work plan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD-GW-1 S, DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A work plan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, DOTD Well Plugging and Abandonment Form, is to be provide to the Administrative Authority.

VI.L. REPORTING AND NOTIFICATION REQUIRMENTS

VI.L.1. Semi-Annual Groundwater Report

A semi-annual groundwater report must be prepared for each sampling event and submitted to the Administrative Authority within ninety (90) days of the sampling event. The report shall include the following:

VI.L.1.a. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;

VI.L.1.b. a facility map showing all wells (up-gradient, point of compliance, assessment, plume defining and recovery) and identifying zones in which wells are screened;

VI.L.1.c. a scaled potentiometric surface showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;

VI.L.1.d. all analytical data, including QA/QC;

VI.L.1.e. a summary of all analytical data;

VI.L.1.f. a statistical method shall be used in evaluating data for each hazardous constituent, as approved by the Administrative Authority;

VI.L.1.g. graphical representation of the values of pH, conductance and the hazardous constituents including:

VI.J.1.g.(1) contaminant concentration isopleth maps;

VI.J.1.g.(2) contaminant concentration versus time graphs;

VI.L.1.h. a discussion of any significant changes in the data from the last reporting period;

VI.L.1.i. a discussion of the down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency; and

VI.L.1.j. evaluation of the effectiveness and progress of any corrective action according to Condition VI.J.1.

VI.L.2. Annual Groundwater Report

An annual groundwater report must be submitted each year no later than March 1, as required by LAC 33:V.1529.D.8. This report must summarize all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the facilities. Applicable calculations must also include groundwater flow contaminant migration rates (as applicable), statistical comparisons, and any other information as it regards corrective action required by this permit.

VI.L.3. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H, VI.I or VI.J when there is statistically significant evidence of contamination for chemical parameters or hazardous constituents.

VI.L.4. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.18 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H, VI.I or VI.J.